

# ***Patend Light 1200***

## ***1200 Basic & 575 Basic***

### Instruction Manual

From Version 1.0



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## 1 Introduction

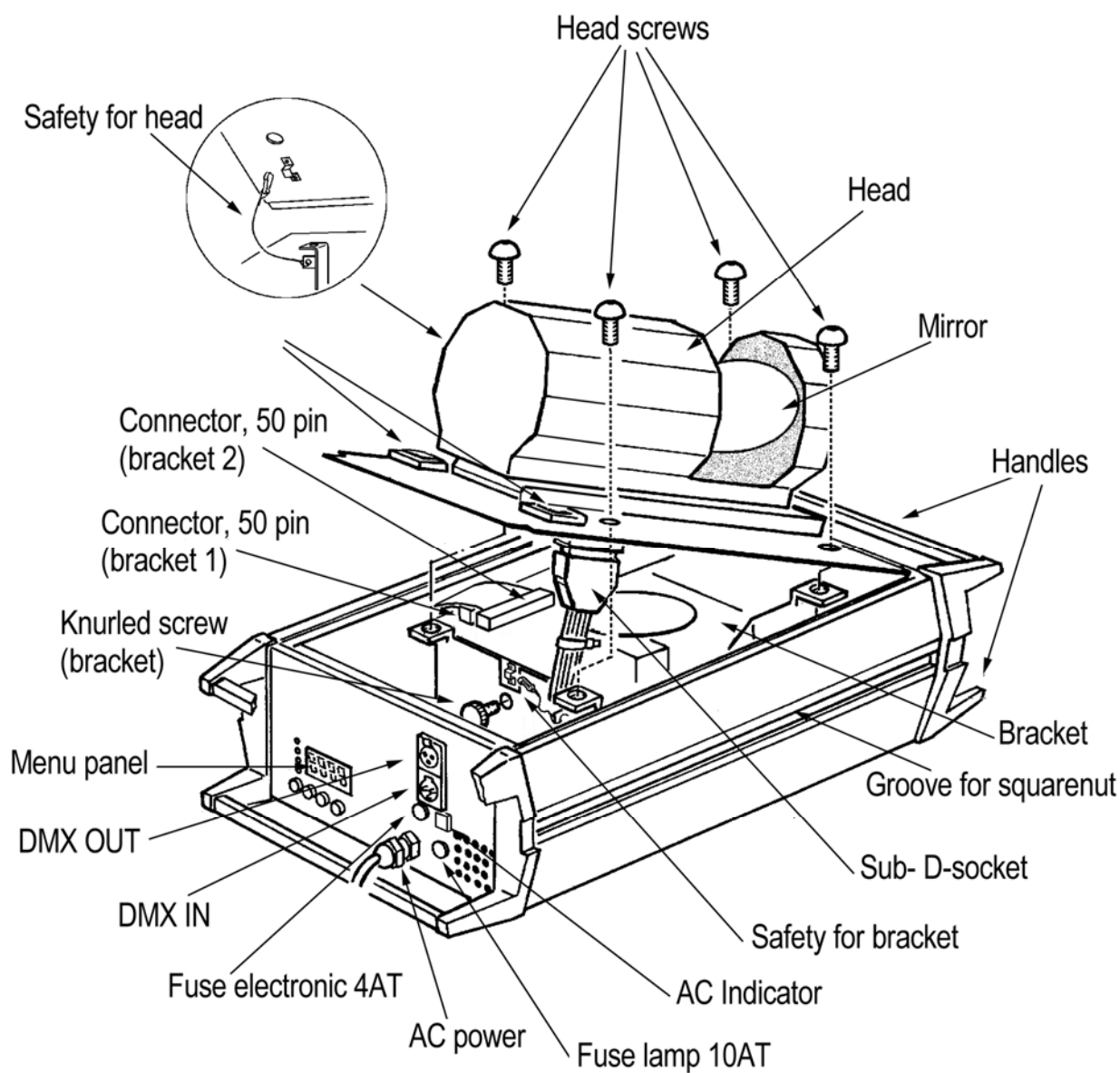


Illustration 1-1

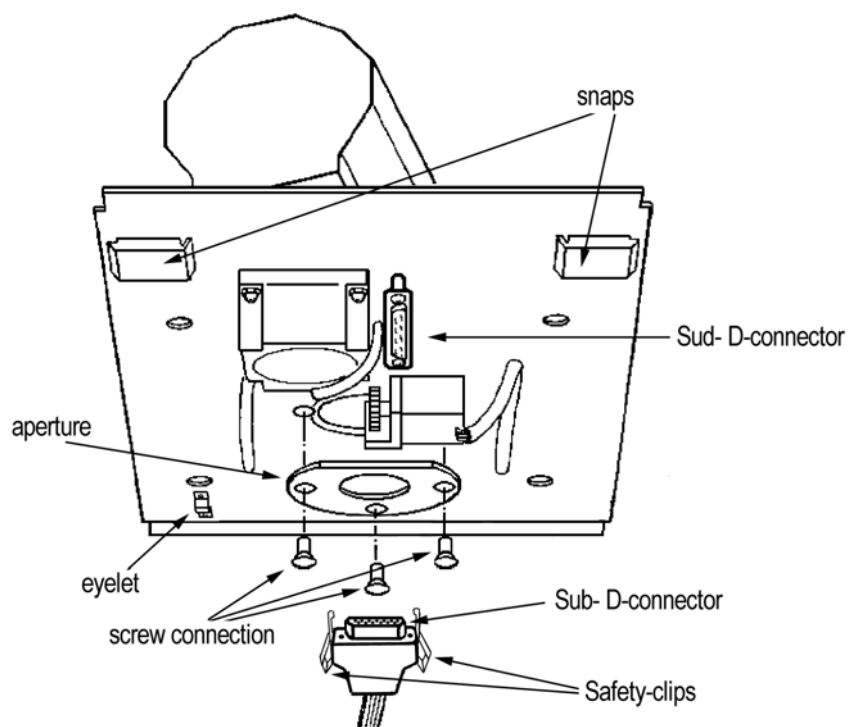


Illustration 1-2

### 1.1 Safety Rules

The **PATEND-LIGHT 1200/575 BASIC** is a high-tech product. To guarantee a smooth operation, it is necessary to keep following rules.

1. Make sure that head and mirror of the **PATEND-LIGHT 1200/575 BASIC**, can rotate without any mechanical problems and that all fan openings are clean and not blocked by anything.
2. Touching the head while moving can cause serious injuries
3. Unplug the **PATEND-LIGHT 1200/575 BASIC** from the AC outlet before any service
4. It is necessary to wait at least 30 minutes after disconnecting the AC before you open the **PATEND-LIGHT 1200/575 BASIC**. Please do not touch the bulb if you are not absolutely sure it is cold. - **Danger of BURNING** -
5. The PATEND-LIGHT 1200/575 BASIC is provided with a protective switch to switch off the lamp when opening it. By no means do not bridge these switch.  
**This can cause serious injuries of your retina !!!**

6. To allow a secure operation, follow also the Installation guide described in chapter 2. Operating the **PATEND-LIGHT 1200/575 BASIC** without suited safety aids like safety cables or clamps/hooks can increase the risk of an accident.
7. The installation should be done by qualified staff only. You need to pay attention to the common rules of technology that are not explicit mentioned in this manual.

## 2 Installation

### 2.1 Mounting

To mount the **PATEND-LIGHT 1200/575 BASIC** use the 8 threads M12 at the backside of the system or use the slidenuts at the side of the body.

#### 2.1.1 Clamps (Hooks)

Mount clamps and/or hooks directly to the base plate.

Please make sure to use right sized clamps and hooks and fit them securely.

#### 2.1.2 Mountingplate

For an easy mounting you can get this as an accessory. In this case a light mountingplate is premounted. After this the **PATEND-LIGHT 1200/575 BASIC** can easily hang up.

The **PATEND-LIGHT 1200/575 BASIC** is fully operational whether it stands, hangs or is mounted to the wall.

Using the **PATEND-LIGHT 1200/575 BASIC** standing on the ground requires a rough but even surface. Make sure that the fan openings are not blocked by any circumstances.

### 2.2 Secure the Patend Light 1200

Use always safety wires to secure the **PATEND-LIGHT 1200/575 BASIC**, connect them with the eye bolt in the slide nut and check the tight fit!

## 2.3 Connectors

### 2.3.1 AC Connectors

230 Volt, 50 Hz / 10AT

### 2.3.2 DMX

DMX 512 Standard input/output

**Please see printing on the case for the right Pin usage!**

[+] = Pin 3 / [-] = Pin 2 / [Ground] = Pin 3

The DMX- Address starts at the **PATEND-LIGHT 1200/575 BASIC** at the DMX- Address [000].

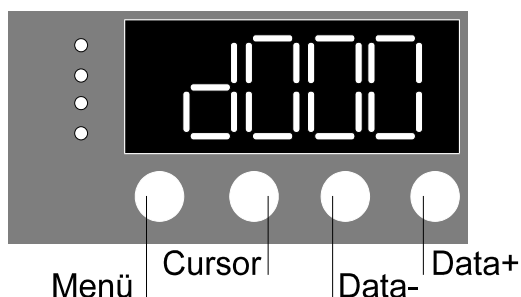
## 2.4 Fuse

The **PATEND-LIGHT 1200/575 BASIC** electronic system is protected by a 5x20 T4A fuse 250V. The lamp is protected by a 5x20 T10A fuse 250V. Please see the printing on the **PATEND-LIGHT 1200/575 BASIC**, for more details look at the Illustration 1-1 in Chapter 1.

**Disconnect AC outlet before changing a fuse !!!**



### 3 The Menu Field



#### 3.1 Adjust the DMX-Address

Right after turning on the **PATEND-LIGHT 1200/575 BASIC** you can see the current DMX-Address. Choose this as follows.

Select the DMX-Level and press the menu key.

This level is called on automatically after turning on the **PATEND-LIGHT 1200/575 BASIC**.



Select the figure you want to adjust by pressing the cursor key.

The selected figure begins to flash.



Adjust the figure by pressing the Data+ or Data- key.



Confirm the DMX-Address by pressing the menu key once.



The DMX-Address is stored also while switching off the **PATEND-LIGHT 1200/575 BASIC !!!**

### 3.2 Read out the Running Time of Lamp and Unit

Select the time level by pressing the menu key twice.



Select the requested time by pressing the cursor key,

#### 3.2.1 Lamp Time 1

The current lamp time is shown alternating with LA 1.



#### 3.2.2 Lamp Time 2

The total lamp time is shown alternating with LA 2.



#### 3.2.3 Life Time

The life time is shown alternating with LIFE.



### 3.3 The CODE Level

This level is accessed by authorized dealers only.

In this level you can adjust all functions. Also the change of Pan/Tilt high-byte and low-byte is possible.

### 3.4 The Test Level

The Test Level makes a function test or a selftest procedure possible.

#### 3.4.1 Selftest Procedure



Select the requested test level by pressing the Cursor key.

Start the Selftest program by pressing the Data+ key. The lamp can be started by pressing the Data+ and Data- keys for 5 seconds at the same time.

You have the following sections:

PR	Selftest of all functions
PAN	Test Head movement
TILT	Test Mirror movement
PSA	Test Prism
dl	Test Dimmer/Shutter
CLr1	Test Colorwheel 1
CLr2	Test Colorwheel 2
GB1	Test Gobowheel 1
GB2	Test Gobowheel 2
IrIS	Test Iris
Gr1	Test Gobo rotation 1
FOCS	Test Focus

Forward with the Data+ key. – Backward with the Data- key.

### 3.5 Temperature Control 1

Deviates the temperature value to much from the system standard, the lamp will turn off automatically.

Reconnection can only be made by authorized dealers.

#### 4 Channel selection ( Overview table )

Channel	Description		DMX-Value	Hex-Value	Value %
<b>1) Head</b>	Headposition, Low Byte (0°-1,41°)		0 - 255	0 - FF	0 – 100%
<b>2) Head</b>	Headposition, High Byte (0°-360°)		0 - 255	0 - FF	0 – 100%
<b>3) Mirror</b>	Mirrorposition, Low Byte(0°-1,41°)		0 - 255	0 - FF	0 – 100%
<b>4) Mirror</b>	Mirrorposition, High Byte (0°-360°)		0 - 255	0 - FF	0 – 100%
<b>5) Speed Head</b>	Speed Head, 1/8min - 5/sec		0 - 255	0 - FF	0 – 100%
<b>6) Speed Mirror</b>	Speed Mirror, 1/4min - 3/sec		0 - 255	0 - FF	0 – 100%
<b>7) Special Function</b>	<b>Head</b>	<b>Mirror</b>			
	<b>Relative Movement</b>		0	0	0%
	Pos < 360°	Pos < 360°	1 - 19	1 - 13	1 – 7%
	Pos > 360°	Pos > 360°	20 - 29	14 - 1D	8 – 11%
	Pos < 360°	Pos > 360°	30 - 39	1E - 27	12 – 15%
	Pos > 360°	Pos < 360°	40 - 49	28 - 31	16 – 19%
	Rotation left	Pos < 360°	50 - 59	31 - 3B	20 – 23%
	Rotation left	Pos > 360°	60 - 69	3C - 45	24 – 27%
	Rotation right	Pos < 360°	70 - 79	46 - 4F	28 – 30%
	Rotation right	Pos > 360°	80 - 89	50 - 59	31 – 35%
	Pos < 360°	Rotation left	90 - 99	5A - 63	36 – 38%
	Pos > 360°	Rotation left	100 - 109	64 - 6D	39 – 42%
	Pos < 360°	Rotation right	110 - 119	6E - 77	43 – 46%
	Pos > 360°	Rotation right	120 - 129	78 - 81	47 – 50%
	Rotation left	Rotation left	130 - 139	82 - 8B	51 – 54%
	Rotation right	Rotation right	140 - 149	8C - 95	55 – 58%
	Rotation left	Rotation right	150 - 159	96 - 9F	59 – 62%
	Rotation right	Rotation left	160 - 254	A0 - FE	63 – 98%
	Reset without Shutter		254	FE	99%
	Reset for all Functions		255	FF	100%
<b>8) Color 1</b>	color 1 (white)		0 - 4	0 - 4	1%
	bi (white – green)		5 - 9	5 - 9	2 – 3%
	color 2 (green)		10 - 14	A - E	4 – 5%
	bi (green – red)		15 - 19	F - 13	6 – 7%
	color 3 (red)		20 - 24	14 - 18	8 – 9%
	bi (red – dark blue)		25 - 29	19 - 1D	10 – 11%
	color 4 (dark blue)		30 - 34	1E - 22	12 – 13%
	bi (dark blue – yellow)		35 - 39	23 - 27	14 – 15%
	color 5 (yellow)		40 - 44	28 - 2C	16 – 17%
	bi (yellow – pink)		45 - 49	2D - 31	18%
	color 6 (pink)		50 - 54	32 - 36	19 – 20%
	bi (pink – turquoise)		55 - 59	37 - 3B	21 – 22%
	color 7 (turquoise)		60 - 64	3E - 40	23 – 24%

Channel	Description	DMX-Value	Hex-Value	Value %
	bi (turquoise – orange)	65 - 69	41 - 45	25 – 26%
	color 8 (orange)	70 - 74	46 - 4A	27 – 28%
	bi (orange – cyan)	75 - 79	4B - 4F	29 – 30%
	color 9 (cyan)	80 - 84	50 - 54	31 – 32%
	bi (cyan – magenta)	85 - 89	55 - 59	33 – 34%
	color 10 (magenta)	90 - 94	5A - 5E	35 – 36%
	bi (magenta – white)	95 - 99	5F - 63	37 – 39%
	rotation cw slow – fast	128 - 191	80 - BF	50 – 74%
	stop	192	C0	75%
	rotation ccw slow – fast	193 - 255	C1 - FF	76 – 100%
<b>9) Color 2</b>	color 1 (white)	0 - 63	0 - 3F	0 – 24%
	color 2 (cyna)	64 - 127	40 - 7F	25 – 49%
	color 1 (white)	128-191	80 – BF	50 – 75%
	color 3 (magenta)	192 -255	C0 - FF	76 – 100%
<b>10) Schutter</b>	shutter open	0 - 9	0 – 9	0 – 3%
	shutter close 1	10 – 19	A – 13	4 – 7%
	shutter close 2	20 - 29	14 – 1D	8 – 11%
	shutter slow – fast	30 – 99	1E – 63	12 – 38%
	shutter close 1	100 – 250	64 – FA	39 – 98%
	shutter open	251 - 255	FB - FF	99 – 100%
<b>11) Dimmer</b>	close (0%)	0 – 9	0 – 9	0 – 3%
	close - open (0-100%)	10 – 249	A - F9	4 – 97%
	open (100%)	250 – 255	FA – FF	98 – 100%
<b>12) Gobo 1</b>	gobo 1	0 - 9	0 - 9	0 – 3%
	gobo 2	10 - 19	A - 13	4 – 7%
	gobo 3	20 - 29	14 - 1D	8 – 11%
	gobo 4	30 - 39	1E - 27	12 – 15%
	gobo 5	40 - 49	28 - 31	16 – 19%
	gobo 6	50 - 127	32 - 7F	20 – 50%
	Rotation cw fast - slow	128 - 191	80 - BF	51 – 74%
	Stop	192	C0	75%
	Rotation ccw slow fast	193 - 255	C1 – FF	76 – 100%
<b>13) Gobo</b>	Stop	0 – 4	0 – 4	0 – 1%
<b>Rotation</b>	Rotation cw slow - fast	5 – 24	5 – 18	2 – 9%
	Stop	25 – 29	19 – 1D	10 – 11%
	Rotation ccw slow - fast	30 – 49	1E – 31	12 – 19%
	Stop	50 – 54	32 – 36	20 – 21%
	gobo position	55 – 255	37 – FF	22 – 100%
<b>14) Gobo 2</b>	Gobo 1	0 – 9	0 - 9	0 – 3%
	Gobo 2	10 – 19	A - 13	4 – 7%
	Gobo 3	20 – 29	14 - 1D	8 – 11%
	Gobo 4	30 – 39	1E - 27	12 – 15%

Channel	Description	DMX-Value	Hex-Value	Value %
	Gobo 5	40 – 49	28 - 31	16 – 19%
	Gobo 6	50 – 127	32 - 7F	20 – 50%
	rotation cw slow . fast	128 – 191	80 - BF	51 – 74%
	stop	192	C0	75%
	rotation ccw slow – fast	193 – 255	C1 - FF	76 – 100%
<b>15) Focus</b>	min – max	0 – 255	0 – FF	0 – 100%
<b>16) Iris</b>	100% - 4%	0 – 255	0 – FF	0 – 100%
<b>17) Prism</b>	open	0 – 9	0 – 9	0 – 3%
	Prism 1	10 – 120	A – 78	4 – 47%
	Effect	121 – 129	79 – 81	48 – 50%
	Prism 2	130 – 255	82 – FF	51 – 100%
<b>Lamp on</b>	shutter (min 2 sec)	240 – 245	F0 – F5	94 – 96%
	dimmer	250 – 255	FA – FF	98 – 100%
<b>Lamp on</b> <small>(from software-version 2.2, this is also shown in the display)</small>	Shutter (min 2 sec)	240 – 255	F0 – FF	94 – 100%
	dimmer	250 – 255	FA – FF	98 – 100%
<b>Lamp off</b>	shutter (min 2sec)	246 – 250	F6 – FA	97 – 98%
	dimmer	0 – 9	0 – 9	0 – 3%
	iris (max 5sec)	x– 255- 0	x - FF - 0	x– 100 –0%
<b>Lamp off</b> <small>(from software-version 2.2, this is also shown in the display)</small>	shutter (min 2sec)	230 – 250	E6 – FA	90 – 98%
	dimmer	0 – 9	0 – 9	0 – 3%
	iris (max 5sec)	x– 255- 0	x - FF - 0	x– 100 –0%

### Relative Movement:

If DMX- channel Nr.7 (Special) is on DMX- [000] you can control the **PATEND-LIGHT 1200/575 BASIC** in **Relative Movement**. Therefor the speed channels No. 5/6 must be also on DMX- [000] If you have a DMX- Value on one of these channels it is automatically on absolute movement. While programming circles or other movements please use the absolute movement.

## 5 Change the Lamp

For a hassle free change of the Light bulb, it is absolutely necessary to follow all descriptions in this chapter step by step.

### 5.1 Safety Rules

- Unplug AC power connection
- Allow to cool (min. 30 minutes)
- Don't touch lamp with bare fingers.
- Install the lamp with the filler to the right direction. (see Illustration 5-1)
- Distance between lamp and lens holder must be min. 5mm.

Close the **PATEND-LIGHT 1200/575 BASIC/575 BASIC** before you connect the AC power!

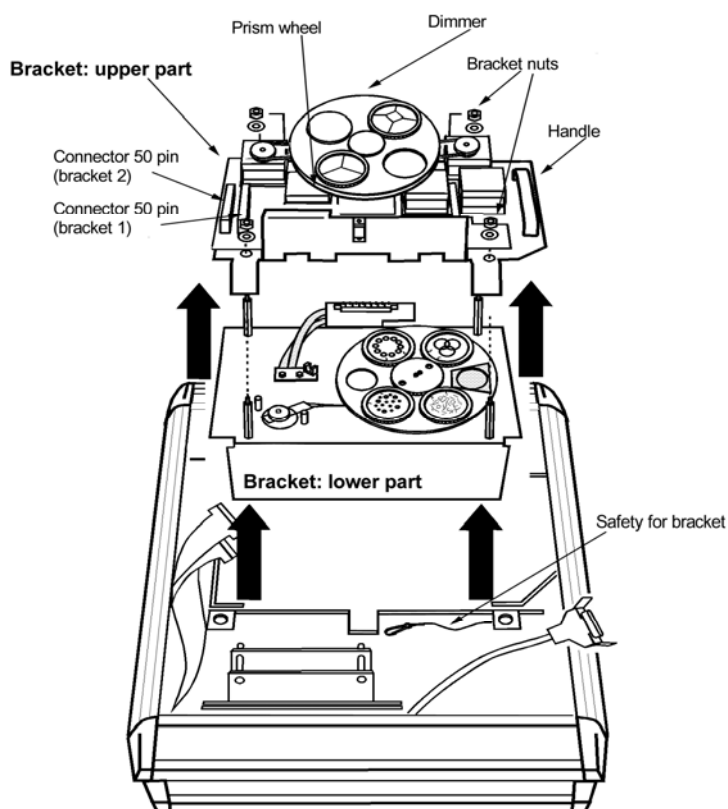


Illustration 5-1

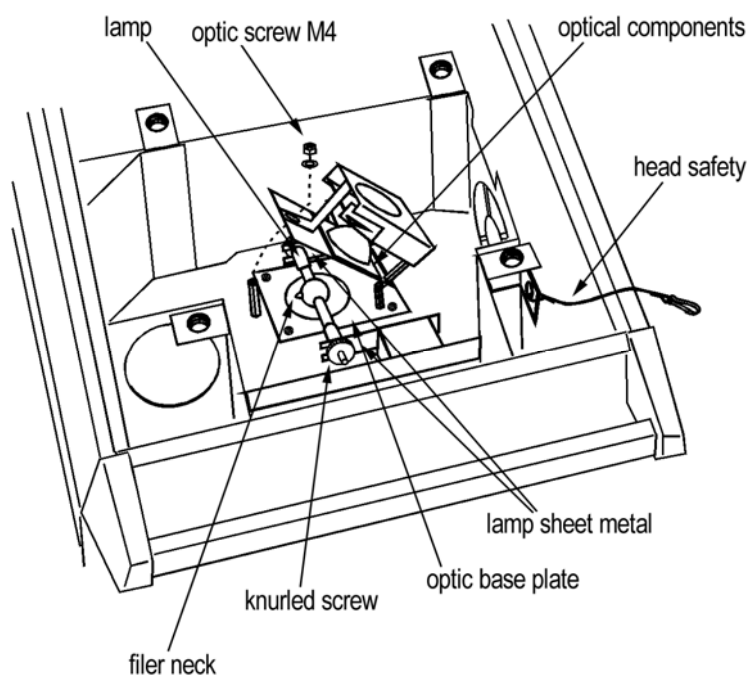
## 5.2 How to change the lamp

Please look also Illustration 1-1 and 5-1/2.

1. Unscrew screws on the head with 8mm wrench.
2. Press the two safety levers at the same time and lift carefully the head plate.
3. Remove Sub-D socket by pressing the safety clips. Hang out the safety loop and lift the head plate cautiously.
4. Remove the multiple pin strip 1 and 2.
5. Open the knurled screw of the Optical Slide.
6. Hang out the safety of the Optical Slide in.
7. Take out the Optical Slide in carefully.
8. Unscrew the M4 screw of the optical plate.
9. Open the upper part of the optical device.
10. Unscrew the HMI lamp nuts and change the lamp.
11. The lamp filler must be placed like in the illustration !!!

Close the **PATEND-LIGHT 1200/575 BASIC** in reverse order.

Attention: Make sure that the optical slide in fits in both grooves !!!



**Illustration 5-2**



## 6 Change the Gobos

The PATEND-LIGHT 1200/575 BASIC is fitted with standard Gobos (37,5 mm). To change one of these it is necessary to open the PATEND-LIGHT 1200/575 BASIC and to remove the optical system.

### 6.1 Safety Rules

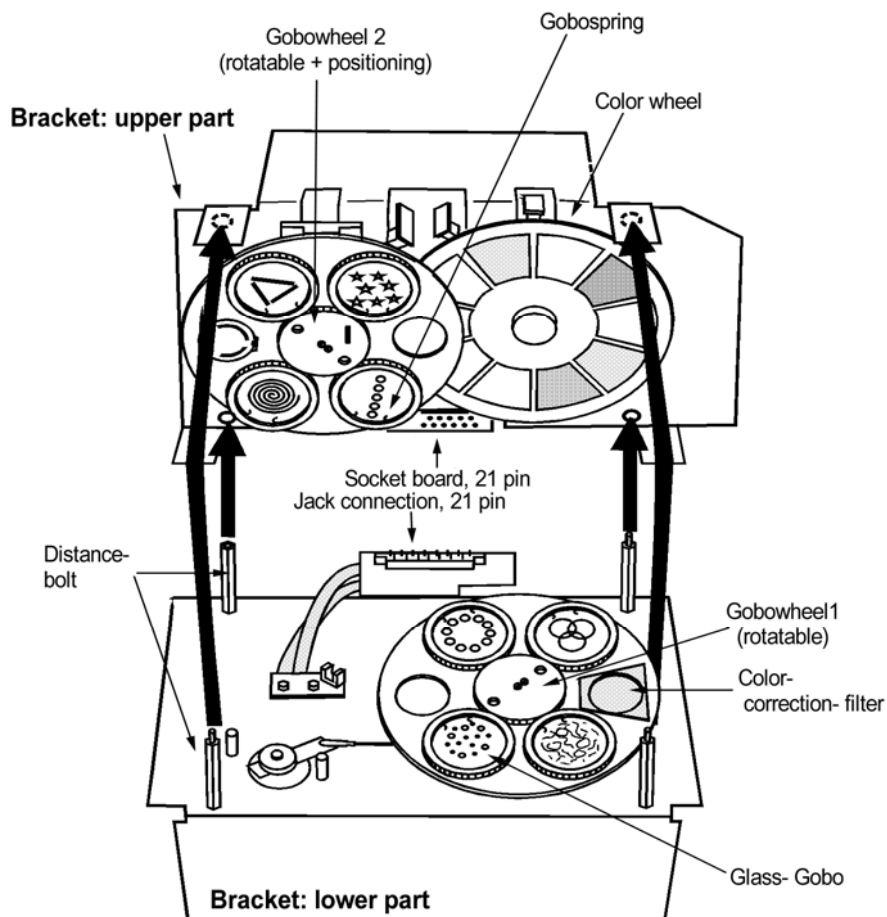
- Unplug AC power connection
- Allow to cool (over 30 minutes)
- Don't touch lamp with bare fingers.
- Close the **PATEND-LIGHT 1200/575 BASIC** before you connect the AC power!

### 6.2 How to change the Gobos

Please look also Illustration 1-1 and 5-1.

1. Unscrew screws on the head with 8mm wrench.
2. Press the two safety levers at the same time and lift carefully the head plate.
3. Remove Sub-D socket by pressing the safety clips. Hang out the safety loop and lift the head plate cautiously.
4. Remove the multiple pin strip 1 and 2.
5. Open the knurled screw of the Optical Screw.
6. Hang out the safety of the Optical Slide in.
7. Take out the Optical Slide in carefully.
8. Unscrew the M4 screw of the optical plate.
9. Open the upper part of the optical device.
10. Unscrew the HMI lamp nuts and change the lamp.
11. The lamp filler must be placed like in the illustration !!!

Close the **PATEND-LIGHT 1200/575 BASIC** in reverse order.



**Illustration 6-1**

Attention: Make sure that the optical slide in fits in both grooves !!!

If you use Glass-Gobos make sure that the mirror side looks towards the lamp side.

## 7 Maintenance the PATEND-LIGHT 1200/575 BASIC

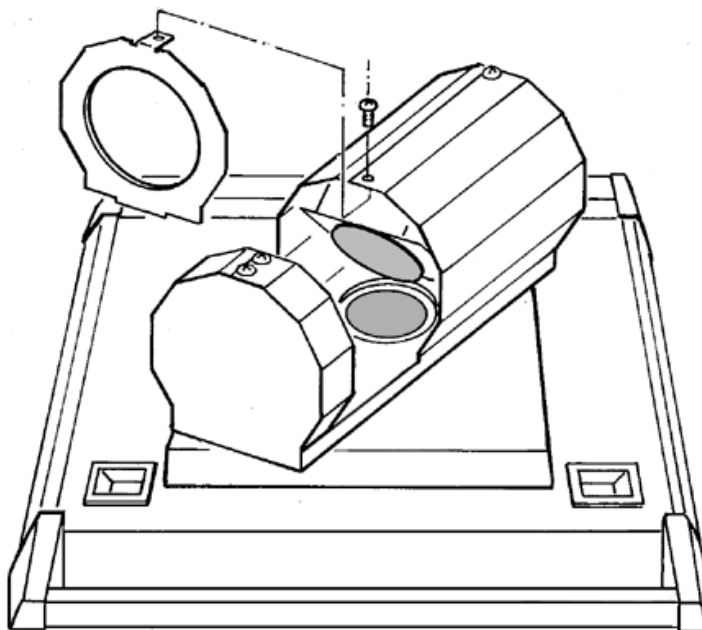
The cleaning of the inner optical System, color filters, color correction filter and lenses should be done by qualified person only! Contact your local **GLP** Dealer for details.

Use no strong detergents, acid etc. for cleaning the case.

### 7.1 Mirror and Optical System

Clean the **PATEND-LIGHT 1200/575 BASIC** optical system with a moistened cloth and a little cleaner.

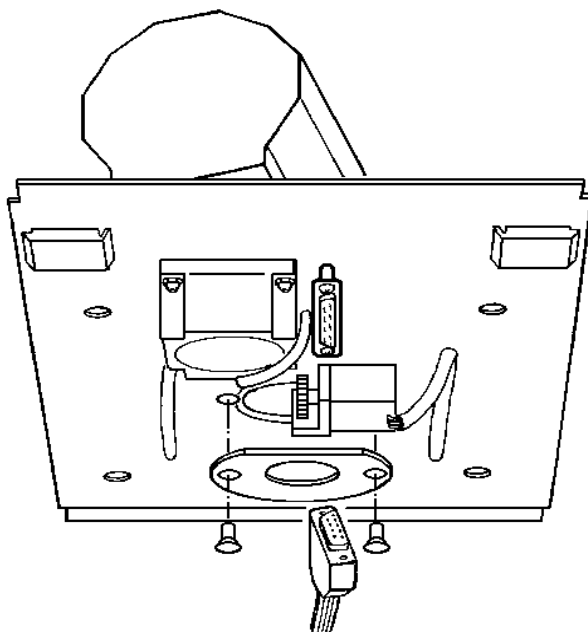
### 7.1.1 Cleaning the inside Mirror and the outside Optical System



**Illustration 7-1**

- Open the screws
- Remove the Mirror Blind

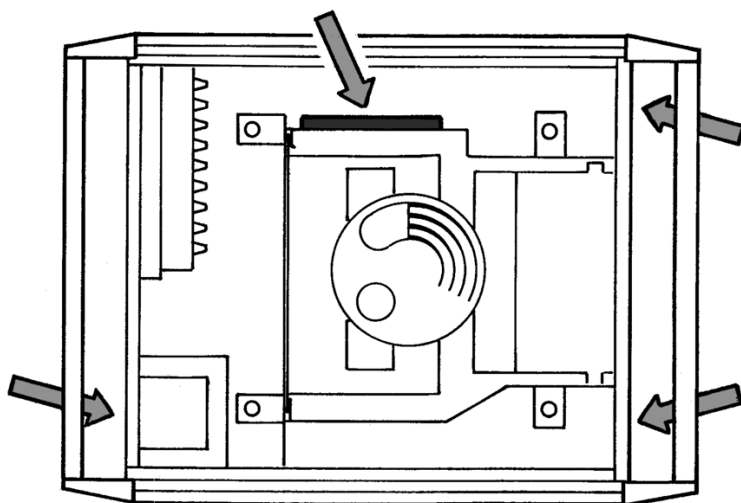
### 7.1.2 Cleaning the outside Optical System



**Illustration 7-2**

1. Unscrew screws on the head with 8mm wrench.
2. Press the two safety levers at the same time and lift carefully the head plate.
3. Remove Sub-D socket by pressing the safety clips. Hang out the safety loop and lift the head plate cautiously.
4. Unscrew the two screws of the aperture.
5. Clean the lenses inside
6. Close the **PATEND-LIGHT 1200/575 BASIC** in reverse order.

## 7.2 Ventilation System



### Illustration 7-3

It is necessary to clean the fan openings, air channels and fan gratings on a regular base (depending on the local environment).

## 8 Technical Data /Overview

- Supply Data 230V/10AT
- 1200 HMI W/S (110.000Lm) or 575 HMI (49.000 Lm) Lamp, bilateral based, with 750h Lamp Life
- Capacitor compensation
- DMX 512 Standard
- weight 39 kg (1200 Basic), 34 kg (575 Basic)
- Dimensions: 596 x 474 x 395 mm
- 2 Colorwheels (up to 18 mixed colors)
- 2 Gobowheels, 4x rotating, 10x fixed, 2x glassgobos
- Frostfilter
- Shutter up to 8 Hz
- High-Speed Iris 100% - 4%
- Dimmer 0 – 100%
- 
- **ROTO-Head**  
Min. 1 round per 8 minutes  
Max. 5 rounds per second  
0,02 degrees resolution  
14.00/25.000 Microsteps/360°

